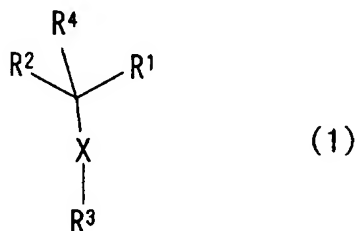


REMARKS/ARGUMENTS

Claims 1, 3-4, 7-17 and 23 are active in this application, Claims 2, 5-6 and 18-20 having been canceled, and claims 21-22 having been withdrawn in response to a restriction requirement. Applicants reserve the right to request rejoinder of non elected claims 21-22 upon allowability of the active claims. The claims have been amended to specify that R¹ is phenyl which may have a substituent and R² and R³ are each independently pyridyl which may have a substituent. This amendment is supported by the claims as originally presented and by the elected group in response to the Restriction Requirement. Additionally, the claims have been amended to delete the term “a solvate thereof” without prejudice to Applicants’ pursuit of coverage for the solvates separately in a continuation or divisional application. Further, claims 7-9 and 11 have been amended to more specifically define the terms heterocycle and heterocyclic and the term “5- to 6- membered aliphatic heterocycle”. These amendments are supported by the specification at paragraphs [0041] and [0042]. The additional amendments to the dependent claims are merely in order to have them conform to proper dependency from newly amended Claim 1. No new matter has been added by these amendments.

The present invention relates to a compound represented by formula (1)



where R¹ represents phenyl which may have a substituent, R² and R³ each independently represents pyridyl which may have a substituent, R⁴ represents a hydrogen atom or a C₁₋₆ alkyl group and X represents –S–, –SO– or –SO₂–; and N-oxide or S-oxide thereof or a salt

thereof. These compounds are found to have an inhibitory activity against production or secretion of β -amyloid protein and can be used in a preparation of pharmaceutical compositions to treat various diseases caused by the abnormal production or secretion of β -amyloid protein such as Alzheimer's Disease, Downs Syndrome and other diseases associated with amyloid deposition.

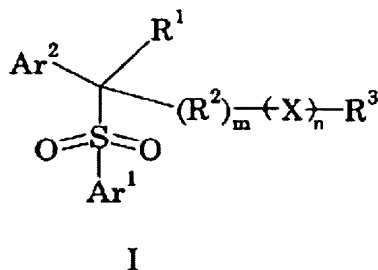
Claims 1-5, 7-17 and 23 stand rejected under 35 U.S.C. § 112, first paragraph. This rejection has been obviated by the deletion, without prejudice, of the term "solvate" from the claims. While Applicants disagree with the Examiner's conclusions regarding enablement with respect to solvates in the present application, Applicants have deleted this term in order to further prosecution of the application at this time, without prejudice to Applicants' presenting claims to such solvates in a further continuation or divisional. Accordingly, this rejection should be withdrawn.

Claims 1-2 stand rejected under 35 U.S.C. § 112, second paragraph. This rejection has been obviated by the amendment of the present claims to remove the objectionable terms mentioned by the Examiner.

Claims 1-5 and 7-17 stand provisionally rejected for obviousness-type double patenting over Claims 18-28 of copending application Serial No. 11/829,533. Since the copending application is still pending, has had no Official Action on the merits, and was later filed than the present application, the Examiner is requested to follow the procedure set forth in the M.P.E.P. and remove this rejection from the present application (since this is believed to be the only remaining rejection following entry of the present amendment) and make any corresponding obviousness-type double patenting rejection in the copending application, if appropriate.

Claims 1-5 and 7-17 stand rejected under 35 U.S.C. § 102(b) over Harrison et al. WO 02/081433. First and foremost Harrison et al. does not disclose the present invention

with enough specificity to rise to the level of an anticipation rejection. Harrison et al. discloses sulphones which modulate the action of γ -secretase wherein the sulphones are compounds of formula (I)



wherein the various substituents are selected from a broad variety of possibilities. While it may be possible to somehow pick and choose from the various substituents while specifying that variables m and n are both zero and somehow arrive at a compound of the present invention, Applicants note that none of the examples within the Harrison et al. reference disclose such a compound and more importantly Harrison et al. provides no method in which to produce a compound of the present invention where m and n are both zero with Ar² and R³ being phenyl or pyridyl as required in the present invention.


In particular, Harrison et al. discloses a variety of compounds and several methods for making their compounds within the text of their application. Beginning at page 13, line 3, Harrison et al. begins to outline the various methods for preparation of their compounds. However, **none** of these methods describes the preparation of a compound wherein m and n are both zero as required to meet the present invention, nor is there any description of a process that would permit the preparation of such compounds, particularly since the group corresponding to R³ of Harrison et al. must be either phenyl or pyridyl, which **cannot** undergo the type of substitution reactions being described in the processes outlined by Harrison et al. In particular, Harrison et al. outlines various nucleophilic displacement reactions in order to couple their reaction materials to arrive at the final product. Such a

reaction cannot be used to generate compounds of Harrison et al. that would correspond to those of the invention. Accordingly, Harrison et al. is **not enabling** for the preparation of compounds of the present invention and thus cannot be an effective reference to anticipate or render obvious the present invention. As such, the Examiner's rejection must be withdrawn.

Applicants submit that the application is now in condition for allowance, and early notification of such action is earnestly solicited.

Respectfully submitted,

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